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10/599,347	09/26/2006	Stein Kuiper	NL 041186	7199

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EXAMINER
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ORTIZ CRIADO, JORGE L

ART UNIT	PAPER NUMBER
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2627

MAIL DATE	DELIVERY MODE
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08/04/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/599,347	<b>Applicant(s)</b> KUIPER ET AL.	
	<b>Examiner</b> JORGE L. ORTIZ CRIADO	<b>Art Unit</b> 2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 18 May 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 27 is/are allowed.
- 6) ☒ Claim(s) 1-26 and 28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 May 2009 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Arguments***

Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

### ***Terminal Disclaimer***

In response to the terminal disclaimer being filed to overcome the provisional rejections of double patenting, it is noted that, an attorney or agent, not of record, is not authorized to sign a terminal disclaimer in the capacity as an attorney or agent acting in a representative capacity as provided by 37 CFR 1.34 (a). See 37 CFR 1.321(b) and/or (c).

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

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Claims 1, 2, 4-18 and 21-26 and 28 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-23 of copending Application No. 10599332.

Although the conflicting claims are not identical, they are not patentably distinct from each other because, copending application claims include all of the limitations of the instant application claims, respectively. Copending application claims also include additional limitations. Hence, the instant application claims are generic to the species of invention covered by the respective copending application claims. As such, the instant application claims are anticipated by the copending application claims and are therefore not patentably distinct therefrom.

Despite difference in language regarding the “at least one first electrode” as in claim current application claims, copending application claims provides additional limitations for an obvious variant having at least one, in the instance case two/pair of electrodes.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 3 and 19-20 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 2 of copending Application No. 10599332.

Claim 3 is an obvious variant of an electrode shapes, hence not patentably distinct.

Claim 19-20 are obvious variants of the chamber walls, hence not patentably distinct.

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***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-8, 15 and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Prins et al. WO02/099527 in view of Le Pesant et al. U.S. Patent No. 4,701,021.

As per claim 1, Prins et al. discloses a switchable optical unit capable of controlling a external beam of radiation passing through an optically active portion of the unit, wherein the optically active portion comprises a region through which the beam of radiation passes, which unit comprises a chamber and an electrically conductive liquid (4) contained in the chamber, the chamber being provided with an electrode configuration wherein application of a voltage (V), from a voltage control system to electrodes causes movement of the said liquid, characterized in that the electrode configuration comprises at least one first electrode (5) fixed to the inner walls of the chamber at the position of the optically active portion, second electrode means (6) fixed to the inner walls of the chamber at positions outside the optically active portion and a third electrode (7) in contact with the conductive liquid and continuously connected to a first output of a voltage source (V of 0V), a second output of which is connected in a first mode to said at least one first electrode (V of 0V) and in a second mode to the second electrode means (V=V); (see Figs. 1a, 1b and 3a, 3b).

Prins et al. does not expressly disclose the arrangement where the beam of radiation passes through the switchable optical unit and that in that wherein in a first mode, the electrically conductive liquid fills the chamber inside the optically active portion, and wherein in a second mode, the electrically conductive liquid fills the chamber outside of the optically active portion, having a chamber and an electrically conductive liquid contained in the chamber, the chamber being provided with electrodes configuration wherein application of a voltage (V), from a voltage control system to electrodes causes movement of the said liquid, (see Figs. 1-4).

However, this arrangement in an optical switching unit is known in the art as evidenced by Le Pesant et al. which discloses an optical switching unit capable of controlling a external beam of radiation passing through an optically active portion of the unit the beam of radiation passes through the switchable optical unit and that in that wherein in a first mode, the electrically conductive liquid fills the chamber inside the optically active portion, and wherein in a second mode, the electrically conductive liquid fills the chamber outside of the optically active portion.

Therefore, it would have been obvious to one of an ordinary skill in the art at the time of the invention to arrange the optical switchable unit having configured so that where the beam of radiation passes through the switchable optical unit and that the electrically conductive liquid fills the chamber inside the optically active portion and fills the chamber outside of the optically active portion in the switching operation modes, providing for arrangement of an optical modulator switching element employing displacement and modification of refraction of the light in the a light path, as taught by Le Pesant et al.

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The combination outlined above further shows the following limitations of the corresponding claims as follow:

As per claim 2, refer to figure 3a, Prins et al. discloses dotted lines of electrode 6, form alternatively an u-shaped cross section.

As per claim 3, Prins et al. discloses wherein the second electrode means (6) includes one flat annular electrode, refers to the figures 1 and 3.

As per claim 4, Prins et al. discloses wherein the interior wall of the chamber facing the liquid is coated with an insulating hydrophobic layer (2) (see page “fluoropolymer”; page 3 line 11).

As per claim 5, Prins et al. discloses wherein the chamber comprises a medium (3) which has an index of refraction different from that of the conductive liquid (Figs. 1,3; description page 2-3).

As per claims 6 and 7, Prins et al. discloses wherein the medium is a liquid, and as in claim wherein is a gas description page 2-3.

As per claim 8, It is readily understood that if gas is being used a vacuum environment is inherently provided.

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As per claim 15, Prins et al. discloses where the voltage control system is arranged to supply a voltage to the at least one of first electrode individually (see Fig. 1).\

As per claim 16, finding the index of refraction with respect to its surroundings would have been merely routine skill in the art in the combination which would have understood that they can be freely chosen and adapted to the envisaged application.

As per claim 19, Prins et al. discloses wherein at least one chamber wall situated in the optically active portion includes a planar surface (see Fig. 3).

As per claim 20, Prins et al. discloses wherein each of two opposite chamber walls situated in the optically active portion includes a planar surface (see Fig. 3).

Claims 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Prins et al. WO02/099527 in combination with Le Pesant et al. U.S. Patent No. 4,701,021 and further in view of Feenstra et al. WO03069380.

Claim 9-11 provides for having refractive lens surface, on the walls of the chambers and particularly an aspherical surface.

These features are not taught by the combination above of the switchable optical unit.

However, such configuration is well known in the art and is evidenced by Feenstra et al., see Fig. 4, a switchable optical unit having refractive lens surfaces particularly aspherical.



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It would have been obvious to one of an ordinary skill in the art at the time of the invention to provide such refractive lens surface in order to provide for a variable focus device.

Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Prins et al. by WO02/099527 in combination with Le Pesant et al. U.S. Patent No. 4,701,021 and further in view of Onuki et al. US Patent Application Publication 2002/0176148.

Although the combination above does not expressly disclose a controllable lens system in a camera/hand-held device having a switchable optical unit.

This is merely one of the well known applications for such optical switchable units, as evidenced by Onuki et al.

It would have been obvious to one of an ordinary skill in the art to provide such optical system units to obtain at very least light beam change capabilities.

***Allowable Subject Matter***

Claims 27 is allowed

Claims 21, 24, 25 and 28 are allowed if overcome the double patenting rejections above.

Claims 22 and 23 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

Claims 12-14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JORGE L. ORTIZ CRIADO whose telephone number is (571)272-7624. The examiner can normally be reached on Mon.-Fri 10:00 am- 6:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrea L. Wellington can be reached on (571) 272-4483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jorge L Ortiz-Criado/  
Primary Examiner, Art Unit 2627